

# [PULSE WIDTH MODULATOR AND LOADING SYSTEM THEREOF]

## Abstract

A pulse width modulator and a loading system thereof are disclosed. The pulse width modulator comprises an amplitude-adjustable triangle-wave generator, an error signal generator and a pulse signal generator. The triangle-wave generator is adapted to perform an amplitude operation according to the reference voltage and the feedback voltage for generating an amplitude-adjustable triangle wave according to a variation of the feedback voltage. The error signal generator is adapted to perform an error operation according to the feedback voltage and the reference voltage for outputting an error signal. The pulse signal generator is adapted to receive and compare the error signal and the amplitude-adjustable triangle wave for outputting a pulse controlling signal for the loading system.